

REMARKS

Responsive to the latest official action, Applicant submits herewith designations in the form of the following claim charts as a convenient format for where in an earlier original specification and drawings there are found adequate support and illustrations for each of the proposed claim changes that are set forth in the amendment filed on or about October 25, 2005 in the present application.

09/903,831 CLAIM CHART

(References are to U.S. Patent No. 5,304,220¹)

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
70	locating a graft assembly in relation to an arteriotomy defined in <u>a side wall</u> of a blood vessel	Abstract; 1:65; 2:34; 2:54-59; 9:13-14; 12:38; 12:68-13:14; 13:42-48.	16-19G, 20A-C
70	a flange portion <u>extending radially about the</u>	10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state,	9A-E, 19A-H, 20A-C

¹ References herein for support of claim changes are to columns and lines of U.S. Patent No 5,304,220, as issued from the original continuation in part specification, although additional support and earlier priority are contained in U.S. Patent No. 5,211,683. The present application is a continuation of application Serial No. 09/475,789, filed December 30, 1999, now U.S. Patent No. 6,599,313, which is a continuation of Application Serial No. 09/111,062 filed July 7, 1998, abandoned, which is a continuation of Application Serial No. 09/090,598 filed June 4, 1998, now U.S. Patent No. 5,934,286, which is a continuation of Application Serial No. 09/073,336, filed May 5, 1998, now U.S. Patent No. 5,979,455, which is a continuation of Application Serial No. 08/702,742, filed August 23, 1996, now U.S. Patent No. 5,749,375, which is a continuation of Application Serial No. 08/391,960, filed February 21, 1995, now U.S. Patent No. 5,571,167, which is a continuation of Application Serial No. 08/138,912, filed October 18, 1993, now U.S. Patent No. 5,456,712, which is a division of Application Serial No. 08/056,371, filed on May 3, 1993, now U.S. Patent No. 5,304,220, which is a continuation-in-part of Application Serial No. 07/725,597, filed on July 3, 1991, now U.S. Patent No. 5,211,683.

² The support referenced with respect to the specification and drawings in U.S. Patent No. 5,304,220 is exemplary and not exhaustive. Applicant notes that additional support can be found in U.S. Patent Nos. 5,304,220 and 5,211,683 that is not specifically referenced in this chart.

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>orifice</u>	<p>springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	
70	<u>extravascularly</u> aligning the orifice of the graft	<p>2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body)</p> <p>10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)</p> <p>11:36-40 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11.)</p> <p>13:42-45 (end portion 62 may be positioned adjacent the sidewall of blood vessel 11 so that the</p>	6, 12-16, 19A-H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		communicating aperture (i.e. the arteriotomy) in the sidewall of blood vessel 11 near upstream site 21 is aligned)	
70	locating the flange portion within the blood vessel <u>against an interior wall with the graft assembly extending through the arteriotomy</u>	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19F, 20A-C
71	<u>including a plurality of arms</u>	10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)	9A-9I, 16-18, 19B, 19E, 19G, 20A-C
71	<u>against an interior wall with at least a portion of each of the arms extending through the</u>	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in</p>	16-19F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>arteriotomy</u>	FIGS. 19E and 19F.)	
75	arteriotomy defined in a <u>side wall of a blood vessel</u>	Abstract; 1:65; 2:34; 2:54-59; 9:13-14; 12:38; 12:68-13:14; 13:42-48.	16-19G, 20A-C
75	plurality of arms <u>attached to the graft</u>	10:28-36 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D)	9A, 9I, 16-18 19B, 19 E, 19G, 20A-C
75	<u>extravascularly</u> advancing the delivery device	2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body) 10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)	6, 12-16
75	<u>with a portion of each of the arms extending through the arteriotomy</u>	11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16) 11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60) 13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)	16-19H, 20A-C
75	<u>in the side wall of the blood</u>	Abstract; 1:65; 2:34; 2:54-59; 9:13-14; 12:38; 12:68-13:14; 13:42-48.	16-19G, 20A-C.

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>vessel</u>		
75	<u>in which a portion of each of the arms extends inside the blood vessel away from the arteriotomy defined therein</u>	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19F, 20A-C
77	<u>wherein the plurality of arms includes at least 4 arms</u>	10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)	9A-9I
80	<u>arteriotomy defined in a side wall of a blood vessel</u>	Abstract; 1:65; 2:34; 2:54-59; 9:13-14; 12:38; 12:68-13:14; 13:42-48.	16-19G, 20A-C
80	<u>with the graft assembly having an orifice at an end</u>	<p>10:27-31 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60)</p>	9A-9E, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>thereof</u>	<p>near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	
80	and a resilient support secured thereto <u>about the orifice</u>	<p>10:27-31 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	9A-I, 19A-H, 20A-C
80	Locating the graft and <u>resilient support</u> w/i a	4:64-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)	9A-I, 10A, 10B, 11A, 12

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	delivery device	<p>10:27-31 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:1-3 (Graft 60 is then inserted into the proximal end of the central lumen of laparoscope 37 and advanced until its full length is entirely therein.)</p>	
80	<u>extravascularly</u> advancing the delivery device	<p>2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body)</p> <p>10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)</p>	6, 12-16
80	<u>alignment with the arteriotomy with the graft and resilient</u>	<p>10:27-31 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a</p>	6-8, 9A-9I, 10A, 10B, 11A, 12-15

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>support</u> located within the delivery device	<p>substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>13:42-45 (end portion 62 may be positioned adjacent the sidewall of blood vessel 11 so that the communicating aperture (i.e. the arteriotomy) in the sidewall of blood vessel 11 near upstream site 21 is aligned)</p>	
80	removing the graft <u>and resilient support</u> from the delivery <u>through the arteriotomy into the blood vessel</u>	<p>5:12-23 (FIG. 13 is a view similar to FIG. 12 but showing the graft prosthesis being advanced out the distal end of the laparoscope in accordance with the preferred method of the present invention. FIG. 14 is a view similar to FIG. 13 but showing the graft prosthesis being further advanced out the distal end of the laparoscope in accordance with the preferred method of the present invention. FIG. 15 is a view similar to FIG. 14 but showing the graft prosthesis being yet further advanced out the distal end of the laparoscope in accordance with the preferred method of the present invention.)</p> <p>11:15-26 (While the plunger is held stationary, laparoscope 37 is then withdrawn axially over plunger 82 and graft 60 in the direction of arrow 84 as sequentially shown in FIGS.13-15. This allows graft 60 in its rolled configuration to be delivered out the distal end of laparoscope 37. FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60</p>	13-16

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16.)	
80	wherein the resilient support moves from a first configuration to a second configuration <u>extending outwardly about the arteriotomy inside the blood vessel</u> due to spring action after the <u>removing</u> step	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19H, 20A-C
81	a first portion of the resilient support is located adjacent to an interior sidewall	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in</p>	16-19F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	of the blood vessel <u>with the resilient support positioned in the second configuration</u>	FIGS. 19E and 19F.)	
82	<u>locating a graft assembly in relation to an arteriotomy defined in a blood vessel, with the graft assembly including a graft and a resilient support secured thereto, the method comprising the steps of:</u>	<p>Abstract; 1:65; 2:34; 2:54-59; 9:13-14; 12:38; 12:68-13:14; 13:42-48.</p> <p>10:27-31 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p>	9A-9I, 16-19G, 20A-C.
82	<u>locating the graft</u>	4:64-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the	10A, 10B, 11A, 11B,

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>within a delivery device</u>	<p>graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p>	12, 13
82	<u>advancing the delivery device toward the arteriotomy while the graft is located within the delivery device; and</u>	<p>5:7:-5:15 (FIG. 12 is a view similar to FIG. 8 but showing the scissors device removed from the laparoscope and replaced with the graft prosthesis and plunger of FIG. 11A in accordance with the preferred method of the present invention. FIG. 13 is a view similar to FIG. 12 but showing the graft prosthesis being advanced out the distal end of the laparoscope in accordance with the preferred method of the present invention.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to</p>	12, 13

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)	
82	<u>removing the graft from the delivery device after the advancing step</u>	<p>5:12-23 (FIG. 13 is a view similar to FIG. 12 but showing the graft prosthesis being advanced out the distal end of the laparoscope in accordance with the preferred method of the present invention. FIG. 14 is a view similar to FIG. 13 but showing the graft prosthesis being further advanced out the distal end of the laparoscope in accordance with the preferred method of the present invention. FIG. 15 is a view similar to FIG. 14 but showing the graft prosthesis being yet further advanced out the distal end of the laparoscope in accordance with the preferred method of the present invention.)</p> <p>11:15-26 (While the plunger is held stationary, laparoscope 37 is then withdrawn axially over plunger 82 and graft 60 in the direction of arrow 84 as sequentially shown in FIGS. 13-15. This allows graft 60 in its rolled configuration to be delivered out the distal end of laparoscope 37. FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16.)</p>	13-16
82	<u>wherein the resilient support is maintained in a first configuration</u>	<p>10:27-31 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to</p>	9A-I, 10A

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>tion during the advancing step</u>	lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)	
82	<u>wherein the resilient support moves from the first configuration to a second expanded configuration due to spring action after the advancing step, and</u>	<p>10:27-31 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>11:20-26 (FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	9A-I, 10A 16-19H, 20A-C
93	<u>inhibiting movement of the graft in a direction outwardly through the</u>	11:36-44 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11. Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion	16, 18, 19A-F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>arteriotomy</u> and away from the blood vessel	<p>61 of graft 60.)</p> <p>11:57-68 (Balloon 88 is then inflated to expand stent 90 to its expanded configuration such that end portion 62 is secured between stent 90 and the sidewall of blood vessel 11 near upstream site 21 as shown in FIG. 18...Moreover, FIGS. 20A-20C show end portion 62 of graft 60 being forced into the sidewall of blood vessel 11 by stent 90 (in its expanded configuration) such that graft 60 is secured to blood vessel 11 near upstream site 21 at its end portion 62.)</p> <p>12:33-39 (As a possible additional procedure in order to further ensure the integrity of the anastomosis between end portion 62 of graft 60 and blood vessel 11 near upstream site 21, a number of sutures 100 may be tied to the sidewall of blood vessel 11 so as to further secure end portion 62 and stent 90 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19B and 19C.)</p> <p>13:9-51 (sutures 100 may be sewn in a conventional running fashion so as to secure end portion 62 to the sidewall of blood vessel 11....This is accomplished by tying a number of sutures 110 to the sidewall of blood vessel 11 and end portion 62 of graft 60 so as to secure end portion 62 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	
94	<u>a sidewall of a blood vessel</u>	Abstract; 1:65; 2:34; 2:54-59; 9:13-14; 12:38; 12:68-13:14; 13:42-48.	16-19G, 20A-C
94	with the graft assembly including a graft <u>having an orifice at an end</u>	<p>10:27-31 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do</p>	9A-9E, 19A-H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>thereof</u>	<p>not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	
94	and a plurality of spring arms <u>extending away from the orifice</u>	<p>10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	9A-9I, 19A-H, 20A-C
94	<u>extravascularly</u>	2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein	6, 12-16, 19A-H,

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	aligning <u>the</u> orifice of the graft with the arteriotomy	<p>the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body)</p> <p>10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)</p> <p>11:36-40 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11.)</p> <p>13:42-45 (end portion 62 may be positioned adjacent the sidewall of blood vessel 11 so that the communicating aperture (i.e. the arteriotomy) in the sidewall of blood vessel 11 near upstream site 21 is aligned)</p>	20A-C
96	<u>other portions of the plurality of the spring arms extend through the arteriotomy and</u> are located outside of the blood vessel after the locating step.	<p>11:25-43 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16...Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11. Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:9-51 (end portion 62 is sutured to the sidewall of blood vessel 11 so as to be positioned substantially adjacent a portion of the sidewall of blood vessel 11 which substantially surrounds the arteriotomy.... once end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 as shown in FIG. 16, end portion 62 is sutured to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.... Note that in this further</p>	16-19H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		alternative step, end portion 62 is sutured to an exterior portion of blood vessel 11 as schematically shown in FIGS. 19G and 19H.)	
101	the graft assembly further includes a flange portion <u>disposed about the orifice</u>	<p>10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	9A-E, 19A-H, 20A-C
102	<u>portion of each of the plurality of spring arms is integrally positioned within the flange portion</u>	10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)	9A-9I

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
102	<u>and another portion of each of the plurality of spring arms extends through the arteriotomy away from the blood vessel</u>	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19F, 20A-C
104	<u>extravascularly advancing the delivery device</u>	<p>2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body)</p> <p>10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)</p>	6, 12-16
104	<u>toward alignment with the arteriotomy while the graft is located within the delivery device</u>	<p>11:36-40 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11.)</p> <p>13:42-45 (end portion 62 may be positioned adjacent the sidewall of blood vessel 11 so that the communicating aperture (i.e. the arteriotomy) in the sidewall of blood vessel 11 near upstream site 21 is aligned)</p>	6-8, 12-16
104	<u>each of the plurality of spring</u>	4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the	9A-I, 10A, 10B, 11A, 12

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	arms is <u>confined within the delivery device</u>	<p>present invention.)</p> <p>10:27-31 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:22-26 (Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16.)</p>	
104	each of the plurality of spring arms moves to <u>an expanded condition extending about the orifice of</u>	<p>10:27-31 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>11:20-26 (FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p>	9A-I, 10A 16-19H, 20A-C.

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	the graft	<p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	
104	<u>within the blood vessel</u> after the advancing step	<p>11:20-26 (FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in</p>	9A-I, 10A 16-19H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		FIGS. 19E and 19F.)	
106	each of the plurality of spring arms is maintained in the <u>confined</u> position due to physical interaction with an inner wall of the delivery device	<p>4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:22-26 (Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16.)</p>	9A-9I, 10A-10B, 13-16
107	inhibiting movement of the graft in a direction <u>outwardly through the arteriotomy and away</u>	<p>11:36-44 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11. Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60.)</p> <p>11:57-68 (Balloon 88 is then inflated to expand stent</p>	16, 18, 19A-F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	from the blood vessel	<p>90 to its expanded configuration such that end portion 62 is secured between stent 90 and the sidewall of blood vessel 11 near upstream site 21 as shown in FIG. 18...Moreover, FIGS. 20A-20C show end portion 62 of graft 60 being forced into the sidewall of blood vessel 11 by stent 90 (in its expanded configuration) such that graft 60 is secured to blood vessel 11 near upstream site 21 at its end portion 62.)</p> <p>12:33-39 (As a possible additional procedure in order to further ensure the integrity of the anastomosis between end portion 62 of graft 60 and blood vessel 11 near upstream site 21, a number of sutures 100 may be tied to the sidewall of blood vessel 11 so as to further secure end portion 62 and stent 90 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19B and 19C.)</p> <p>13:9-51 (sutures 100 may be sewn in a conventional running fashion so as to secure end portion 62 to the sidewall of blood vessel 11....This is accomplished by tying a number of sutures 110 to the sidewall of blood vessel 11 and end portion 62 of graft 60 so as to secure end portion 62 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	
107	due to physical interaction of <u>portions of the plurality of spring arms against an interior wall of the blood vessel</u>	<p>10:27-31 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>11:36-44 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11. Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60.)</p> <p>11:57-68 (Balloon 88 is then inflated to expand stent 90 to its expanded configuration such that end portion 62 is secured between stent 90 and the sidewall of</p>	9A-I, 16, 18, 19A-F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		<p>blood vessel 11 near upstream site 21 as shown in FIG. 18...Moreover, FIGS. 20A-20C show end portion 62 of graft 60 being forced into the sidewall of blood vessel 11 by stent 90 (in its expanded configuration) such that graft 60 is secured to blood vessel 11 near upstream site 21 at its end portion 62.)</p> <p>12:33-39 (As a possible additional procedure in order to further ensure the integrity of the anastomosis between end portion 62 of graft 60 and blood vessel 11 near upstream site 21, a number of sutures 100 may be tied to the sidewall of blood vessel 11 so as to further secure end portion 62 and stent 90 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19B and 19C.)</p> <p>13:9-51 (sutures 100 may be sewn in a conventional running fashion so as to secure end portion 62 to the sidewall of blood vessel 11....This is accomplished by tying a number of sutures 110 to the sidewall of blood vessel 11 and end portion 62 of graft 60 so as to secure end portion 62 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	
109	the conduit assembly includes a blood flow conduit and a resilient member secured <u>about an orifice at an end of the blood flow conduit, the</u>	<p>10:27-32 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening</p>	9A-E, 16-19G, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>method comprising:</u>	would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)	
109	<u>extravascularly aligning the orifice of the blood flow conduit with the arteriotomy</u>	<p>2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body)</p> <p>10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)</p> <p>11:36-40 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11.)</p> <p>13:42-45 (end portion 62 may be positioned adjacent the sidewall of blood vessel 11 so that the communicating aperture (i.e. the arteriotomy) in the sidewall of blood vessel 11 near upstream site 21 is aligned)</p>	6, 12-16, 19A-H, 20A-C
109	<u>locating a second portion of the resilient member extending through the arteriotomy outside of the blood</u>	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:9-51 (end portion 62 is sutured to the sidewall of blood vessel 11 so as to be positioned substantially adjacent a portion of the sidewall of blood vessel 11 which substantially surrounds the arteriotomy.... once end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 as</p>	16, 19A-H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	vessel	shown in FIG. 16, end portion 62 is sutured to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.... Note that in this further alternative step, end portion 62 is sutured to an exterior portion of blood vessel 11 as schematically shown in FIGS. 19G and 19H.)	
109	<u>confining</u> the resilient member to a first configuration	<p>4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:22-26 (Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16.)</p>	10A, 10B, 11A, 11B, 13-16
109	<u>expanding</u> the resilient member from the <u>confined</u>	4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)	16-19H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	first configuration	<p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:20-26 (FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p>	
109	to a second <u>expanded</u> configuration <u>about the arterioto my within the blood</u>	<p>11:20-26 (FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted</p>	16-19H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>vessel</u> due to spring action after the advancin g step	back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60) 13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)	
117	An anastomosis method <u>using a conduit assembly including a blood-flow conduit having a resilient member secured thereto about an orifice at an end of the blood flow conduit, the method comprising:</u>	10:27-31 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.) 12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice) 12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)	9A-I, 19A-H, 20A-C
117	<u>extravascularly placing the conduit assembly adjacent</u>	2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body) 10:19-21 (above positioning step includes the step of	6, 12-16

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	to the arteriotomy defined in a blood vessel	advancing the graft prosthesis within the human body 10 with a medical instrument.)	
117	<u>including</u> <u>(i)</u> <u>extravascularly</u> aligning the orifice of the blood flow conduit with the arteriotomy	<p>2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body)</p> <p>10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)</p> <p>11:36-40 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11.)</p> <p>13:42-45 (end portion 62 may be positioned adjacent the sidewall of blood vessel 11 so that the communicating aperture (i.e. the arteriotomy) in the sidewall of blood vessel 11 near upstream site 21 is aligned)</p>	6, 12-16, 19A-H, 20A-C
117	locating a first portion of the resilient member including a plurality of struts within the blood	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	vessel <u>through</u> <u>the</u> <u>arterioto</u> <u>my and</u> <u>in contact</u> <u>with an</u> <u>interior</u> <u>wall of</u> <u>the blood</u> <u>vessel</u> <u>about the</u> <u>arterioto</u> <u>my.</u>		
117	locating a second portion of the resilient member <u>extending</u> outside of the blood vessel <u>through</u> <u>the</u> <u>arterioto</u> <u>my</u>	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:9-51 (end portion 62 is sutured to the sidewall of blood vessel 11 so as to be positioned substantially adjacent a portion of the sidewall of blood vessel 11 which substantially surrounds the arteriotomy.... once end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 as shown in FIG. 16, end portion 62 is sutured to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.... Note that in this further alternative step, end portion 62 is sutured to an exterior portion of blood vessel 11 as schematically shown in FIGS. 19G and 19H.)</p>	16-19H, 20A-C
121	with the conduit assembly including a blood flow	10:27-31 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)	9A-I, 19A-H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	conduit and a strut assembly <u>secured thereto about an orifice at an end thereof.</u>	<p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	
121	<u>confining</u> the blood flow conduit within an interior space of a delivery device	<p>4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:22-26 (Since graft 60 is no longer held in its rolled</p>	10A, 10B, 11A, 11B, 12, 13

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16.)	
121	<u>extravascularly</u> advancing a distal end of the delivery device	2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body) 10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)	6, 12-16
121	<u>through</u> the arteriotomy	13:42-45 (end portion 62 may be positioned adjacent the sidewall of blood vessel 11 so that the communicating aperture (i.e. the arteriotomy) in the sidewall of blood vessel 11 near upstream site 21 is aligned) 11:36-40 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11.)	6-8, 12-16
121	<u>with</u> the blood flow conduit <u>confined</u> within the interior space of the delivery device <u>and</u>	4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.) 10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to	10A, 10B, 11A, 11B, 12, 13

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		<p>point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:22-26 (Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16.)</p>	
121	<u>after the advancing step, configuring the strut assembly within the blood vessel to a second configuration</u>	<p>11:20-26 (FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19H, 20A-C
121	<u>with the strut assembly extending within the blood vessel about the arteriotomy and with the</u>	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:9-51 (end portion 62 is sutured to the sidewall of blood vessel 11 so as to be positioned substantially adjacent a portion of the sidewall of blood vessel 11</p>	16, 19A-H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>blood-flow conduit extending outwardly through the arteriotomy away from the blood vessel</u>	which substantially surrounds the arteriotomy.... once end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 as shown in FIG. 16, end portion 62 is sutured to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.... Note that in this further alternative step, end portion 62 is sutured to an exterior portion of blood vessel 11 as schematically shown in FIGS. 19G and 19H.)	
123	each of the plurality of struts extend <u>radially outwardly</u> from the orifice of the blood flow conduit <u>with the strut assembly positioned in the second configuration</u>	<p>10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)</p> <p>11:20-26 (FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	9A-E, 16-19H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
123	the strut assembly is positioned in the second configuration and <u>with the orifice of the blood flow conduit aligned with the arteriotomy</u>	<p>11:36-40 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p> <p>13:42-45 (end portion 62 may be positioned adjacent the sidewall of blood vessel 11 so that the communicating aperture (i.e. the arteriotomy) in the sidewall of blood vessel 11 near upstream site 21 is aligned)</p>	6-8, 12-16, 19A-19H, 20A-C
125	positioning each of the plurality of struts adjacent to <u>an interior wall of the blood vessel</u>	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
125	<u>and extending away from the arteriotomy</u> after the advancing step	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19F, 20A-C
127	<u>portion of each of the plurality of struts extends through the arteriotomy</u> and is located outside of the blood vessel after the positioning step	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:9-51 (end portion 62 is sutured to the sidewall of blood vessel 11 so as to be positioned substantially adjacent a portion of the sidewall of blood vessel 11 which substantially surrounds the arteriotomy.... once end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 as shown in FIG. 16, end portion 62 is sutured to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.... Note that in this further alternative step, end portion 62 is sutured to an exterior portion of blood vessel 11 as schematically shown in FIGS. 19G and 19H.)</p>	16, 19A-19H, 20A-C
129	the conduit assembly further includes a flange portion <u>secured to the</u>	10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly	9A-9I, 16-19H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>blood flow conduit near an end thereof adjacent the strut assembly</u>	extending as previously shown and described.)	
132	the <u>blood flow conduit</u> is a synthetic graft	10:22-39 (One type of graft prosthesis which may be used is a graft, generally designated by the reference numeral 60 and shown in FIGS. 9A-9E. Graft 60 includes a body portion 61 having a length slightly larger than the distance between upstream site 21 and downstream site 31. Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E....Graft 60 further includes a second end portion 63 having a design similar to that of a conventional prosthetic graft as shown in FIG. 9A. Graft 60 is preferably made of synthetic fibers.)	9A-9E
133	the strut assembly moves from the <u>confined</u> configuration to the second configuration due to spring action	<p>4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled</p>	16-19H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		<p>configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:20-26 (FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p>	
136	Inhibiting movement of the blood flow conduit in a direction away from the <u>arteriotomy</u> in the blood vessel due to physical interaction between the strut assembly and the blood vessel <u>with the</u>	<p>11:36-44 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11. Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60.)</p> <p>11:57-68 (Balloon 88 is then inflated to expand stent 90 to its expanded configuration such that end portion 62 is secured between stent 90 and the sidewall of blood vessel 11 near upstream site 21 as shown in FIG. 18...Moreover, FIGS. 20A-20C show end portion 62 of graft 60 being forced into the sidewall of blood vessel 11 by stent 90 (in its expanded configuration) such that graft 60 is secured to blood vessel 11 near upstream site 21 at its end portion 62.)</p> <p>12:33-39 (As a possible additional procedure in order to further ensure the integrity of the anastomosis between end portion 62 of graft 60 and blood vessel 11 near upstream site 21, a number of sutures 100 may be tied to the sidewall of blood vessel 11 so as to</p>	16-19F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	strut assembly in the second configuration	further secure end portion 62 and stent 90 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19B and 19C.) 13:9-51 (sutures 100 may be sewn in a conventional running fashion so as to secure end portion 62 to the sidewall of blood vessel 11....This is accomplished by tying a number of sutures 110 to the sidewall of blood vessel 11 and end portion 62 of graft 60 so as to secure end portion 62 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)	
137	Locating a conduit assembly in relation to an opening defined in a <u>sidewall of a blood vessel</u> ,	Abstract; 1:65; 2:34; 2:54-59; 9:13-14; 12:38; 12:68-13:14; 13:42-48.	16-19G, 20A-C
137	with the conduit assembly including a blood flow conduit <u>having a flange portion</u>	10:27-28 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E.)	9A-E
137	a plurality of struts <u>attached thereto about an</u>	10:28-36 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if	9A-I

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>orifice at an end thereof, the method</u>	<p>desired, to maintain end portion 62 outwardly extending as previously shown and described.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	
137	advancing the <u>flange portion</u> and plurality of struts into the blood vessel through the opening	<p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19F, 20A-C
137	aligning the <u>orifice</u> of the blood flow conduit with the opening defined	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior</p>	16-19F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	in the blood vessel, <u>with the</u> flange portion and each of the plurality of struts <u>attached</u> <u>thereto</u> <u>extending</u> <u>inside the</u> <u>blood</u> <u>vessel</u> <u>about the</u> <u>opening</u> <u>defined</u> <u>therein</u>	portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)	
142	Locating a conduit assembly in relation to an opening defined in <u>a</u> <u>sidewall</u> <u>of</u> a blood vessel; with the conduit assembly including a blood flow conduit and a	Abstract; 1:65; 2:34; 2:54-59; 9:13-14; 12:38; 12:68- 13:14; 13:42-48.	16-19G, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	plurality of struts		
142	<u>extravascularly</u> moving the delivery device toward the opening defined in the blood vessel <u>with</u> the blood flow conduit located within the delivery device	<p>2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body)</p> <p>10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)</p>	6, 12-16
142	located in a first physical arrangement <u>confined within the delivery device</u>	<p>4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to</p>	10A, 10B, 11A, 11B, 12, 13

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		<p>point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:22-26 (Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16.)</p>	
142	reconfiguring each of the plurality of struts from the first physical arrangement to a second physical arrangement <u>extending within the blood vessel about the opening therein.</u>	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19H, 20A-C
142	<u>with the blood flow conduit extending through the</u>	<p>1:46-48 (a method of implanting a graft prosthesis in the body of a patient to bypass a segment of a blood vessel.)</p> <p>6:65-68 (The preferred method disclosed herein describes the implantation of a graft to couple aorta 16 to right common femoral artery 18 thereby bypassing</p>	16-19F

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>opening for conducting blood flow away from the blood vessel</u>	<p>occluded segment 14)</p> <p>7:26-29 (implantation of a graft prosthesis of the present invention to couple aorta 16 to right common femoral artery 18 thereby bypassing occluded segment 14 of blood vessel 11.)</p> <p>14:42-50 (Once blood flow reaches former upstream isolated region 40, a flow of blood will enter graft 60 and flow therethrough to former downstream isolated region 50 thereby bypassing occluded segment 14. Consequently, proper blood flow will now exist in body 10 from point C within aorta 16 to point D within right common femoral artery 18 as a result of performing the above described method of bypass of occluded segment 14.)</p>	
153	the conduit assembly including a blood flow conduit and a resilient support secured thereto <u>near any end thereof</u>	10:27-31 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)	9A-I
153	<u>confining the resilient support in a first configuration</u>	<p>4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:28-36 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a</p>	9A-9I, 10A-10B, 13-16

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
		<p>plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p>	
153	<u>extravascularly</u> advancing the resilient support and partially through the arteriotomy <u>with the resilient support</u> in the first configuration	<p>2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body)</p> <p>10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body 10 with a medical instrument.)</p>	6, 12-16

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
153	<u>with the blood flow conduit extending through the arteriotomy away from the blood vessel; and</u>	<p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19F, 20A-C
153	<u>after the advancing step, releasing the resilient support to move from the first configuration to a second configuration extending about the arteriotomy inside the blood vessel</u>	<p>11:20-26 (FIG. 15 shows end portion 62 of graft 60 positioned within upstream isolated region 40 and end portion 63 of graft 60 positioned at downstream site 31. Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19H, 20A-C
153	<u>due to the spring action of the resilient</u>	10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a	9A-9E, 16-19H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>support</u>	<p>plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)</p> <p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	
156	the conduit assembly further includes a flange portion <u>secured to the blood flow conduit near the end thereof</u>	10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)	9A-E
156	the at least one arm is positioned in contact with the flange portion to	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior</p>	16-19F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>urge the flange portion into contact with an interior wall of the blood vessel</u>	portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)	
159	locating the blood flow conduit, <u>and resilient support</u> within a delivery device	<p>4:64-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p>	9A-9I, 10A, 10B, 11A, 11B, 12, 13
159	<u>extravascularly</u> advancing the delivery device toward the	<p>2:40-44 (advancing the end portion of the graft through the incision to the second location, wherein the advancing step is performed while the second location is covered by the substantially intact portion of the epidermis of the body)</p> <p>10:19-21 (above positioning step includes the step of advancing the graft prosthesis within the human body)</p>	6, 12-16, 19A-H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	arteriotomy <u>in alignment therewith</u>	<p>10 with a medical instrument.)</p> <p>11:36-40 (Also shown in FIG. 16, end portion 62 of graft 60 is positioned within upstream isolated region 40 near upstream site 21 and end portion 63 of graft 60 is positioned at downstream site 31 while body portion 61 of graft 60 is positioned outside of blood vessel 11.)</p> <p>13:42-45 (end portion 62 may be positioned adjacent the sidewall of blood vessel 11 so that the communicating aperture (i.e. the arteriotomy) in the sidewall of blood vessel 11 near upstream site 21 is aligned)</p>	
159	while the blood flow conduit <u>and resilient support are</u> located within the delivery device	<p>4:64-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:27-31 (End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p>	9A-I, 10A, 10B, 11A, 12

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
162	Wherein the resilient support member is <u>confined</u> in the first configuration by physical interaction with an inner wall of the delivery device	<p>4:54-67 (FIG. 11A is an elevational view of the laparoscope of FIG. 6. Moreover, FIG. 11A shows the graft prosthesis of FIG. 10A, positioned within the laparoscope in accordance with the method of the present invention.)</p> <p>10:50-66 (Graft 60 is positioned within the open central lumen defined in laparoscope 37. In order to achieve the above, graft 60 is preferably rolled into a substantially cylindrical shape as shown in FIGS. 10A and 10B. End portion 62 of graft 60 is manipulated to lie substantially parallel to body portion 61 of graft 60 while graft 60 is in its rolled configuration as shown in FIG. 10A. The outer diameter of graft 60, in its rolled configuration, from point W to point Y is larger than the outer diameter of the rolled graft from point Y to point Z as shown in FIG. 10A. The above is due to the angular construction of end portion 62 as shown in FIG. 9A. The outer diameter of the rolled graft from point W to point Y is slightly smaller than the inner diameter of laparoscope 37. As a result, in its rolled configuration, graft 60 can be positioned within the open central lumen of laparoscope 37.)</p> <p>11:22-26 (Since graft 60 is no longer held in its rolled configuration by the inner diameter of the open central lumen of laparoscope 37, graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16.)</p>	9A-9I, 10A-10B, 11A, 12-16
166	the step of inhibiting movement of the blood flow conduit <u>through</u> the <u>arteriotomy</u> in a	<p>11:57-68 (Balloon 88 is then inflated to expand stent 90 to its expanded configuration such that end portion 62 is secured between stent 90 and the sidewall of blood vessel 11 near upstream site 21 as shown in FIG. 18...Moreover, FIGS. 20A-20C show end portion 62 of graft 60 being forced into the sidewall of blood vessel 11 by stent 90 (in its expanded configuration) such that graft 60 is secured to blood vessel 11 near upstream site 21 at its end portion 62.)</p> <p>12:33-39 (As a possible additional procedure in order to further ensure the integrity of the anastomosis</p>	18, 19A-H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>direction</u> away from the blood vessel due to physical interaction between the resilient support and the blood vessel after the <u>releasing</u> step	<p>between end portion 62 of graft 60 and blood vessel 11 near upstream site 21, a number of sutures 100 may be tied to the sidewall of blood vessel 11 so as to further secure end portion 62 and stent 90 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19B and 19C.)</p> <p>13:9-51 (sutures 100 may be sewn in a conventional running fashion so as to secure end portion 62 to the sidewall of blood vessel 11....This is accomplished by tying a number of sutures 110 to the sidewall of blood vessel 11 and end portion 62 of graft 60 so as to secure end portion 62 to the sidewall of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	
433	locating a conduit assembly in relation to an opening defined in a <u>sidewall</u> of a blood vessel,	Abstract; 1:65; 2:34; 2:54-59; 9:13-14; 12:38; 12:68-13:14; 13:42-48.	16-19G, 20A-C
433	with the conduit assembly including a blood flow conduit <u>having an</u>	<p>10:27-31 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do</p>	9A-9E, 19A-H, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>orifice at an end</u>	<p>not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	
433	and a flange portion <u>extending radially about the orifice</u>	<p>10:27-36 (Graft 60 has an outwardly extending flanged end portion 62 as shown in FIGS. 9A, 9C, 9D and 9E. End portion 62 is resiliently maintained outwardly extending by four springs 64A-64D as shown in FIGS. 9B and 9E-9I. In their relaxed state, springs 64A-64D maintain end portion 62 within a plane P1 as shown in FIG. 9A. It should be noted that a number of springs other than four may be used, if desired, to maintain end portion 62 outwardly extending as previously shown and described.)</p> <p>12:10-13 (Note that stent 90 includes a plurality of intersecting bars 71 which span the orifice of graft 60 near end portion 62 as shown in FIG. 20B. Intersecting bars 71 which span the above orifice do not substantially hinder blood flow through the graft orifice)</p> <p>12:21-24 (stent 90 would have an opening defined in its sidewall which is of similar dimensions to the orifice of graft 60 near end portion 62. Such opening would have no intersecting bars traversing thereover. The above modification would allow stent 90 to be positioned within blood vessel 11 near upstream site 21 wherein the above opening would be substantially superimposed over the orifice of graft 60 near end portion 62.)</p>	9A-E, 19A-H, 20A-C
433	advancing the	11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)	16-19F, 20A-C

Claim # (09/903,831)	Claim Change	Support from '220 Specification ²	Support from '220 Figures
	<u>flange portion</u> into the blood vessel through the opening	<p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	
433	the flange portion <u>disposed inside the blood vessel against the sidewall</u> and extending radially away from the orifice of the blood flow conduit	<p>11:25-26 (graft 60 becomes unrolled and reverts to its prerolled configuration as shown in FIG. 16)</p> <p>11:40-43 (Note that end portion 62 has also reverted back to its prerolled configuration so that such end portion is outwardly extending relative to body portion 61 of graft 60)</p> <p>13:23-25 (end portion 62 is sutured to an interior portion of blood vessel 11 as schematically shown in FIGS. 19E and 19F.)</p>	16-19F, 20A-C

Also responsive to the latest official action, Applicant reports that claims to subject matter which may be considered similar to the subject matter claimed in the present application are contained in copending applications Serial No. 10/726,803, filed 12/2/2003; Serial No. 10/731,068, filed 12/8/2003; and Serial No. 10/824,043, filed 4/13/2004.

Favorable consideration is requested of the pending claims, and of the support and illustrations therefor, as set forth in the previous amendment and in this supplement thereto.

Respectfully submitted,
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